

Specification for Portable Longitudinal Steel Barrier

A. The Steel Barrier shall be highly portable and crashworthy longitudinal barrier especially suited for use as a temporary barrier in highway construction zones when assembled.

B. The NCHRP 350 TL-3 barrier to provide positive protection system when deployed as specified by manufacturer.

C. Each barrier section shall be constructed of minimum of two side panels. The side panels will be inwardly sloping to interact with an impacting vehicle in a manner that resists penetration, vaulting, and under riding.

D. Individual barrier sections shall meet the following dimensions:

Length: 13' 6" to 26'

Width: 21.5" to 28"

Height: 32" to 33"

Weight: 1,020 lbs. to 3,300 lbs.

E. The ends of each barrier section shall connect using a single steel pin and not require the use of additional tools. The connection pin shall be constructed to securely connect adjoining sections. The ends shall be designed to facilitate vertical stacking of barrier sections.

F. Each barrier sections shall contain 2 pairs of crank down caster wheels for increased mobility and deployment of sections.

G. All structural elements shall be fabricated from galvanized steel. All welding shall be performed by or under the direction of a certified welder.

H. All bolts, nuts, and washers shall be galvanized. All bolts, nuts, and washers shall be commercial quality "American National Standard", unless otherwise specified.

I. Product must be lightweight and of stackable design to allow for easy deployment.

J. Performance criteria: Portable steel barrier shall be fully tested to, and shall meet the recommended structural adequacy, occupant risk, and vehicle trajectory criteria set forth in the National Cooperative Highway Research Program report 350: (NCHRP-350-TL-3) when properly installed according to the manufacturer's recommendations.

K. Barrier sections have a forklift ports located near the midpoint of each section for ease of lifting and stacking with a standard fork lift.

L. Barrier sections must arrive assembled and ready to deploy.

Acceptable Brand and Model: Trinity Highway, Vulcan Barrier, 4M, Barrier Systems Armorguard Barrier, or equivalent.

Specification for Portable Impact Attenuator:

- A. Impact attenuator must meet MASH, TL-3 performance criteria as a redirective and non-gating crash cushions and be compatible with the Portable Longitudinal Steel Barrier.
- B. Impact Attenuator must be delivered assembled and ready for use with Asphalt Anchor kits

Acceptable Brand and Model: Trinity Highway, QuadGuard M10, TL-3, 24" Wide; Barrier Systems TAU IIM, TL-3; or equivalent.

Additional EQUIPMENT:**Transitions:**

- A. Transition from Attenuator to Portable Steel Barrier for bi-directional locations. Must be compatible with Attenuator and Steel Barrier.

Anchorage

- A. Anchor Straps: to limit deflection of Portable Longitudinal Steel Barrier as recommended by manufacturer.
- B. Anchor Kit for Asphalt Installations: to include required epoxy, 18" anchor bolts, and hardware for 4 Anchors as recommended by the manufacturer for Asphalt Installations.
- C. Anchor Kit for Concrete Installations; to include epoxy, 7" anchor bolts, and hardware for 6 Anchors as recommended by the manufacturer for Concrete Installations.

Delivery locations and contacts:

TDOT REGION ONE
7345 REGION LANE
KNOXVILLE, TN 37901
ERIC WOLFENBARGER 865-594-2697

TDOT REGION TWO
7500 VOLKSWAGON DRIVE
CHATTANOOGA, TN 37416
LONNIE HINKLE 423-510-1260

TDOT REGION THREE
6601 CENTENNIAL BLVD.
NASHVILLE, TN 37243
RANDY MANESS 615-350-4424

TDOT REGION FOUR
300 BENCHMARK PLACE. BLDG. E
JACKSON, TN 38301
JOSH WALLER 731-935-0265

Invoices should be sent to the address shown on each purchase order.